

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte OSAMU KITADE and TAKAHIRO KOMATSU

Appeal No. 1997-4426
Application No. 08/515,767

ON BRIEF

Before JERRY SMITH, KRASS, and LALL, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 29 and 31-52, which constitute all the claims remaining in the application. An

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amendment after final rejection was filed on January 16, 1997 and was entered by the examiner.

The disclosed invention pertains to a dynamic type semiconductor memory device, and more particularly, to a circuit for controlling refresh operations of the memory cells of such a memory device.

Representative claim 29 is reproduced as follows:

29. A dynamic type semiconductor memory device including a plurality of memory cells each having a storage data refreshed, comprising:

voltage level detecting circuitry coupled to receive a power supply voltage and for detecting a level of the power supply voltage and generating a refresh instruct signal in accordance with the result of detection;

refresh request circuitry [sic] including a refresh timer for generating a refresh request signal at a predetermined interval when activated, and coupled to receive said refresh instruct signal for generating said refresh request signal requesting refreshing of data of memory cells among said plurality of memory cells when said refresh instruct signal is active to instruct the refreshing;

control circuitry coupled to receive said refresh request signal and responsive to the refresh instruct signal being active for generating a control signal required for execution of said refreshing; and

a logic gate circuit coupled to receive an external control signal and said refresh instruct signal, for selectively disabling an output of said voltage level detecting circuitry and generating said refresh instruct

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signal in accordance with said external control signal.

The examiner relies on the following references:

Hoshi	5,150,329	Sep. 22, 1992
Arimoto et al. (Arimoto)	5,249,155	Sep. 28, 1993

Claims 29 and 31-52 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Hoshi in view of Arimoto.

Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of

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skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 29 and 31-52. Accordingly, we reverse.

At the outset, we note that the examiner has not specifically made a rejection of the claims under the first paragraph of 35 U.S.C. § 112, yet the examiner makes several observations in the prior art rejection which apparently question the adequacy of the disclosure to support the claimed invention. We agree with appellants that the examiner cannot properly make such an implied rejection. All rejections must be clearly made of record accompanied by an appropriate explanation of the basis for each rejection. The examiner's reasons for questioning the disclosure make no sense to us.

For example, the examiner notes that there is insufficient supporting disclosure to make a determination of whether there is supporting disclosure for some of the claimed elements [answer, pages 7-8]. The examiner indicates that he dropped the rejection of the claims under the first paragraph of 35 U.S.C. § 112 because there was a lack of sufficient supporting disclosure to make an intelligent determination in that regard. This reasoning is bizarre and makes no sense to

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us. A disclosure cannot be too insufficient to make an insufficient disclosure rejection. It is sufficient for us to note that we consider all of the examiner's comments with respect to the inadequacies of the instant disclosure to be irrelevant to the prior art rejection which has been appealed to us.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta

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Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

The examiner's rejection applies the teachings of Hoshi and Arimoto generally to all the appealed claims as a

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single group. The rejection makes no reference to any of the specific claims on appeal. In the brief, appellants have indicated that each of the independent claims should stand or fall separately [brief, page 7]. Appellants' brief also points to specific limitations in each of the independent claims which have not been addressed by the examiner [id., pages 15-18]. The examiner, however, has found that the 10 separate independent claims would require 45 separate arguments to meet the requirements of 37 CFR § 1.192(c)(6) [answer, pages 2-3]. Since there are not 45 separate arguments in support of the separate patentability of the claims, the examiner observes that all the claims should stand or fall together as a single group.

In our view, appellants have satisfied the rule for having the independent claims considered separately for patentability. As long as appellants have pointed to differences between specific claims, and have given an acceptable reason why such differences render the claims separately patentable, such claims will be considered separately for patentability. Thus, we will consider the

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independent claims on appeal before us as separately patentable as argued by appellants.

With respect to each of the independent claims on appeal, the examiner points to items in Hoshi which are deemed to be the same as or equivalent to the claimed voltage level detecting circuitry and the timer means. The examiner apparently considers the control circuitry and the logic gate circuitry of the claims to be nothing more than "dummy black box means" which are no different from any other dummy empty black box means. The examiner also notes that statements of intended function cannot differentiate between structure. The examiner then simply points to the differential amplifiers and counters disclosed in Arimoto and concludes that it would have been obvious to use such circuits in Hoshi [answer, pages 5-6].

With respect to independent claim 29, we find that the examiner has not only failed to provide an acceptable motivation for combining the teachings of Arimoto with Hoshi, but also failed to establish a prima facie case of the obviousness of the claimed invention. The examiner's rejection on its face ignores specific language of the claims

and treats elements as empty black boxes. The interconnections of the components in the claims, however, and the specific functions recited for various circuitry cannot be ignored when applying prior art. The examiner's position that the claimed invention is directed to common features for a refresh circuit does not establish a prima facie case of obviousness. Although we might agree with the examiner that the invention is claimed in a broad manner, that does not relieve the examiner of finding and applying prior art which teaches or suggests the invention as claimed. The applied prior art and the examiner's explanation on this record do not support the rejection of claim 29.

For example, the examiner attempts to read the logic gate circuit of claim 29 on certain gates of Hoshi [answer, page 8], but the logic gates of Hoshi identified by the examiner do not perform the functions recited in claim 29. The logic gate circuit of claim 29 must selectively disable an output of the voltage level detecting circuit, but we can find nothing in Hoshi which selectively disables the output of circuit 21. The logic gates identified by the examiner certainly do not perform this function.

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With respect to each of the other independent claims, we agree with appellants that the examiner has not attempted to address the specific limitations of these claims which are different from the limitations of claim 29. Therefore, the examiner has clearly not established a prima facie case of the obviousness of these claims. Thus, we do not sustain the rejection of any of the claims on appeal in this application based on this record.

In conclusion, the decision of the examiner rejecting claims 29 and 31-52 is reversed.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
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ERROL A. KRASS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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PARSHOTAM S. LALL)
Administrative Patent Judge)

rwk

MCDERMOTT, WILL & EMERY
600 13TH STREET, NW
WASHINGTON, DC 20005